

Introduction:

In the summer of 2002, the architectural and engineering firm of Fletcher Thompson was retained to complete a feasibility study of Tokeneke Elementary School. The primary purpose of the study was to identify various options for upgrading the facility. The proposed upgrades focused on infrastructure and building system improvements, increased security, improved functionality of the physical space within the facility and other improvements aimed at improving the delivery of education at the school. Four options, ranging from a complete upgrade of the existing facility without constructing any new space to the construction of an entirely new facility, were studied and presented to the Board of Education at their meeting on Tuesday, November 26, 2002.

Since then, the administration has presented additional reports and the Board of Education has had additional discussions regarding the various options. The purpose of this report is to provide an overall summary of the additional studies and discussions that have been held to date.

Why does the facility need upgrading?

Before examining each of the options in more detail, the essential question of why the facility needs upgrading must first be addressed. The answer lies in the major issues that currently exist with the facility's infrastructure, in the functional, operational and educational related issues that impact the delivery of education and in security issues resulting from the campus design of the facility.

Infrastructure Issues: Many of the facility's infrastructure components have reached, or will soon reach, the end of their useful lives. As a result, these infrastructure systems are no longer reliable and it is becoming increasingly difficult to provide a physical environment that remains conducive to the delivery of education on a consistent basis. Repairs, to the extent possible, have been implemented. However, it has become increasingly evident that replacement of many building systems will soon be required. The "band aid" approach is simply not a viable long-term solution for maintaining the facility. Section 2.0 – Existing Site and Facility Data, of the Feasibility Study prepared by Fletcher Thompson, provides a detailed assessment of many of these infrastructure and building system issues and problems.

Functional, Operational and Educational Related Issues: While it is true that badly needed infrastructure upgrades and replacements are helping to drive the need to renovate or replace Tokeneke School, there are extremely important educational, operational and functional issues that should also be addressed. Primary examples include the following:

- Because the facility consists of a series of independent buildings with no connecting corridors, children must often put on their coats in order to go to the core areas of the building. This wastes time and can clearly create interruptions.
- The lack of corridors between the buildings also creates maintenance and operating issues. Transporting equipment and supplies is more difficult and time consuming. Non-tempered air can easily enter the classrooms and additional dirt and debris can easily enter the rooms.
- The common room has several inadequacies. There is not a separate area for the serving line to the cafeteria. As a result, children waiting in line for their lunch must line up in the common room itself. In addition, the main entrance doors to the common room open directly from the outside. Therefore, children, staff and visitors traveling to other parts of the facility must often walk directly through the common room. This can be extremely disruptive when a program is taking place in the room. Finally, as with the classrooms, opening these entrance doors in the colder weather allows non-tempered cold air to blow directly into the room.
- The configuration of the eight (8) classrooms in the 1996 additions hampers the ability to teach classes in these rooms. As illustrated below, this configuration simply does not provide sufficient space for teaching. The actual “usable” space of the classroom is only 550 square feet. This is significantly less than the 850-900 square feet of usable space in the other classrooms at the school. As a result, teachers in these rooms are simply not able to teach as effectively as they could in better-designed classrooms.

Security: The campus-like design of the school results in easily accessible classrooms that are somewhat isolated from other areas of the school. In addition, there are not controlled access points to the facility. Essentially, one can enter any of the buildings without going through a controlled or supervised main entrance. Teachers and parents have safety concerns with this situation.

In summary, a school building should provide an environment that allows for the delivery of education in the best way possible. The aging infrastructure, the operational, functional and educational issues and the perceived lack of adequate security hamper Tokeneke's buildings from providing such an environment.

Tokeneke's "Unique" Construction:

In further trying to understand the need to upgrade Tokeneke School, it is important to bear in mind the "unique" construction of the facility. Simply put, it is not a typical New England school. That is, it is not the typical "bricks and mortar" school composed of a single building with traditional hallways and with mechanical systems and piping located in easily accessible basements or interior crawl spaces. Rather, the school consists of series of smaller buildings that are constructed primarily of wood and glass. As already referenced, there are no corridors connecting the buildings. In addition, most of the mechanical distribution systems are located in below-ground pipe chases or are buried directly. The result is that the facility simply does not have the durability of the other elementary schools in Darien. The wood components and glass window walls have a shorter life span and require more maintenance. The mechanical distribution system is also of significant importance. This underground distribution system is susceptible to accelerated deterioration and failure due to exposure to freeze-thaw cycles, ground water and other elements inherent in underground distribution systems of this time period. Unlike the more traditional school facilities, these heating and water supply lines are not easily accessible for repairs nor is it always evident when a pipe has deteriorated and started to leak. This leads to the potential for more extensive repairs and additional maintenance. Again, Tokeneke School is simply not as durable a facility as the other elementary schools and, in many cases, repairs are not as easily implemented.

As part of previous district-wide capital projects budgets, some limited capital projects aimed at infrastructure upgrades at Tokeneke have been completed over the past years. Like the other elementary schools, re-roofing and miscellaneous asbestos abatement work has been performed and upgrades to the kitchens were completed. However, window replacements – which have been completed at Holmes, Hindley and Royle – have not been implemented at Tokeneke. In addition, there have been only very limited upgrades to the facility's mechanical systems and other building systems. The 1996 renovation and expansion project primarily focused on constructing additional space at the school. It also included some reconfiguration of existing space, the installation of new boilers and some code upgrades. However, the project did not, to any large extent, include significant upgrades to many of the existing building's infrastructure system. Less money was spent on Tokeneke School

than on any of the remaining four elementary schools that were expanded and renovated as part of the 1996 elementary school project.

Summary of Options:

The Feasibility Study outlined four different options for upgrading the facility in order to address the problems with the current facility. A summary of those options follows:

Option “A”: Option “A” includes upgrading the existing facility to a “like new” status without the addition of any new space. The total cost, after anticipated State reimbursement, is estimated to be approximately \$5,844,756.

Option “A-1”: This option is essentially identical to Option “A” except that the existing gymnasium would be demolished and a new gymnasium would be constructed in the vicinity of the existing library. The total cost, after State reimbursement, is estimated to be approximately \$6,153,028.

Option “B”: Option “B” essentially calls for demolishing most of the original classrooms, the gymnasium and the common room. These spaces would then be replaced with new construction. Additional new construction would also be required in order to provide enclosed corridors to the 1996 additions – which would undergo light renovations and remain in place. The total estimated cost, after State reimbursement, is \$15,579,221.

Option “C”: This option consists of constructing an entirely new facility on the existing site. The existing facility would then be demolished. The anticipated cost, after State reimbursement, for Option “C” is approximately \$17,331,568.

Summary of the Options:

Option:	Program Area: (Gross S.F.)	Construction Duration:	Life Expectancy:	Estimated Project Cost:
A	47,627 s.f.	4 years	25 years	\$5,844,756
A-1	47,991 s.f.	4 years	25 years (not including new gym)	\$6,153,028
B	69,708 s.f.	4 years	50-70 years	\$15,579,221
C	63,599 s.f.	2 years	70 years	\$17,331,568

Estimated project costs are the total project costs to the Town after State reimbursement.

Narrowing the Options:

In the discussions that have taken place since the above options were first presented, it became evident that Option “B” was not as viable as the other options. Essentially, it simply didn’t appear to be cost effective when compared to constructing an entirely new facility. This is even more evident when one considers that the resulting floor plan would be extremely inefficient due to the construction of the corridors required to connect the new construction with the existing portions of the building that would remain in place. For a financial investment of the order of

magnitude required by Options "B" and "C", Option "C" would clearly result in a far superior finished product that would probably have lower operating costs and a longer overall life expectancy. Therefore, Option "B" is not being considered in the remaining sections of this report.

Additional Reviews of Option "A":

Since the presentation of the Feasibility Study, Option "A" has been further examined in two different manners. This was done in order to provide additional information that would further help in the evaluation of the viability of Option "A".

Completing Option "A" Over an Extended Duration: First the possibility of implementing the scope of work as a series of small capital projects over an extended duration of time, in lieu of completing the work as a single capital project, was explored. The apparent intention was to spread out the costs over a longer period of time. However, it became fairly obvious that proceeding in this manner was not feasible. The primary reasons included the additional cost, the reduction in possible State reimbursement, the increased construction risks and the extended adverse educational and operational impact. An updated copy of the report, including a schedule, detailing the concept of implementing Option "A" over an extended period of time is attached.

Prioritization of Option "A": Next, the scope of work for Option "A" was prioritized and each specific scope item was placed into one of three priority levels. This prioritization was developed in order to provide more clear rationale for the necessity of project scope elements and to begin to place some level of importance on those elements. Prioritizing the individual projects proved to be extremely difficult and, to some extent, the argument could easily be made that almost all of the projects should be placed in the highest priority level. Upgrades to failing infrastructure systems are clearly a high priority. However, implementing upgrades aimed at improving the delivery of education could be viewed as a high priority as well. An updated copy of the report outlining the prioritization of Option "A" is attached as well.

Comparison of Options "A", "A-1" and "C":

Now that the options have been summarized, it is important to begin to make comparisons in order to provide additional information to aid in the discussions regarding the selection of a preferred option. The comparison will focus on the following:

- Scope of work
- Program
- Educational, functional, security and operational issues
- Schedules
- Building life spans
- Financial considerations

Scope of Work:

Option “A”: As referenced, Option “A” includes upgrading the existing facility to a “like new” status without constructing any new space. These upgrades would primarily involve replacing several of the facility’s infrastructure systems. Examples include replacing the heating distribution system and window walls, re-roofing the library and gymnasium, repairing other building components and implementing other code and safety related projects. The interior space of the original building would receive cosmetic upgrades and the casework and storage areas in the new classrooms would be reconfigured to allow for better use of the space. Upon completion, the school would essentially be brought up to a “like new” status and would be in compliance with all existing codes and regulatory requirements.

The original classrooms would receive extensive, or “heavy” renovations under Option “A”. Along with the infrastructure system upgrades referenced above, these classrooms would receive all new finishes and casework. In addition, new lighting would be installed and the ceiling would be painted in order to further improve the lighting. The bathrooms would also receive new finishes and fixtures. Essentially, these older classrooms would be entirely upgraded from an infrastructure and cosmetic standpoint but would not be reconfigured in any way.

Renovations to the 1996 classrooms would be less extensive and would be considered as “light” renovations. Minor cosmetic upgrades, such as painting and increased lighting would be implemented. In addition, the casework and storage areas would be somewhat reconfigured or relocated in the hopes of increasing the overall usable space of these rooms.

Finally, the existing administrative area of the 1996 addition would undergo “moderate” renovations. This would include cosmetic upgrades as well as some physical reconfigurations in order to increase functionality and efficiency.

Option “A-1”: The scope of work for A-1 is essentially same as for Option “A” except that a new gymnasium would be constructed and the existing gymnasium would be demolished.

Option “C”: The scope of work for Option “C” is relatively straightforward. It includes constructing a new facility that meets modern standards and includes all of the features one would expect in a new school facility. This would include automated building control systems, adequate and energy efficient lighting systems, tel/data systems and other systems and components required to provide for the delivery of education for many years to come. The facility would be constructed utilizing modern construction materials and methodology.

Program:

In architectural terms, “program” essentially refers to the types and sizes of physical spaces that are required and the number of students/staff that can be accommodated in those spaces.

Option “A”: The program for Option “A” is the same program that currently exists at the facility. Under this option, the renovated facility would not include any additional classrooms or support spaces and the total size of the facility would be the same that currently exists - approximately 47,627 gross square feet. To some extent, additional classrooms could be added if enrollment were to increase.

Option “A-1”: The program for Option “A-1” is essentially the same as for Option “A”. The only minor difference is that the new gymnasium would be approximately 364 square feet larger than the existing gymnasium. All other space at the facility would remain the same size as currently exists and as that called for in Option “A-1”.

Option “C”: In order to try and provide for accurate comparisons, the program was basically kept the same for each option. As with Options “A” and “A-1”, Option “C” includes the same number and sizes of classrooms as the existing facility. However, constructing a new facility does provide the opportunity to alleviate some of the program shortages that exist at the current facility. Therefore, Option “C” includes a larger cafeteria and additional administrative support space. If enrollment were to increase, additional classrooms could also be added to the design.

It is also important to note that the existing facility, along with the updated facility that would be created by implementing Options “A” or “A-1”, essentially has no corridors and other support space. Presumably, the new facility called for in Option “C” would be designed in a more traditional manner and would include enclosed corridors and other support space. Therefore, the overall gross square footage of option “C” is larger than that of Option “A” (63,599 s.f. vs. 47,627 s.f.). However, most of that increase is due to the enclosed corridors and is not due to significant increases in the sizes and number of rooms and other spaces.

Educational and Functional Issues:

While it is true that badly needed infrastructure upgrades and replacements are helping to drive the need to renovate or replace Tokeneke School, there are educational and functional issues that are also extremely important and must be considered as well. The facility must provide space that allows for the delivery of education in the best way possible. The facility must also be as operationally efficient and functional as possible.

Option “A”: Many, if not all, of the educational and functional deficiencies of the existing facility would remain in place after the completion of the scope of work outlined in Option “A”. The infrastructure upgrades would clearly provide for greater

comfort within the facility and improvements such as new lighting would certainly help from an educational standpoint. However, there would still be some inherent problems with the renovated facility. Primary among these would be the issues related to the lack of corridors at the facility. As previously mentioned, this requires children to put on coats when going to the core areas of the building and also presents maintenance and cleaning issues. The issues related to the current common room would also remain after the completion of Option "A". In addition, security would also remain a factor. Although Option "A" does include perimeter security fencing and more controlled access points for entering the facility, the same level of security that could be provided in a new and traditionally designed building simply would not be achieved by Option "A".

Finally, the lack of "usable" space in the 1996 classrooms would also remain an issue after the implementation of Option "A". If the scope of work were expanded, this issue could potentially be resolved. This would entail incorporating the space occupied by the current bathrooms in the 1996 classroom additions into the actual classrooms. This could potentially increase the "usable" size of these classrooms from 550 square feet to approximately 850 square feet. New bathrooms would then have to be constructed. The preliminary cost estimate for this additional work is approximately \$350,000-\$400,000.

Option "A-1": As with Option "A", most of the educational and functional deficiencies of the existing facility would still exist after the implementation of Option "A-1". However, there would be benefits from the construction of a new gymnasium. The new gymnasium could be built at grade level and access could be much more convenient. In addition, the new gym could be located more near the front of the site to allow for better community access and use. The potential for indoor air quality problems that exist in the current gymnasium due to its being below grade and adjacent to wetlands would also be clearly avoided with the construction of a new gymnasium. As with Option "A", creating additional "usable" space in the 1996 classrooms could also be added to the scope of work for Option "A-1"

Option "C": All of the inadequacies that would continue to exist after the implementation of Options "A" and "A-1" would clearly be alleviated with the construction of a new facility. Classrooms would be designed to provide the best possible configuration for teaching and learning. Traditional enclosed corridors with classrooms on both sides of it would clearly lead to greater efficiency and reduced maintenance issues. In addition, a better overall spatial configuration could be provided. For instance, the classroom areas of the facility could be separated from the more common or public areas. This would allow for better security. Another example would include having the common room and gymnasium room adjacent to each other with the stage, or raised platform, located in between and accessible from either space. This would provide tremendous flexibility in the use of these spaces. Locating the common areas in a more accessible location will provide for greater public use. Finally, because a new building could be designed to have a smaller overall footprint, an additional soccer field could be accommodated in the site plan.

Given the overall shortage of field space in Darien, this would be an important benefit for the community.

Security:

Security, at schools in general and Tokeneke in particular, is becoming more and more of a concern. In looking at the issue of security, the difficult part is to balance the needs of providing a reasonable and prudent means of security at the school while limiting the inconveniences that these added security measures would have on students, staff and parents. Even if extraordinary security measures were taken, a school can never be one hundred percent secure. Because of the need for reasonably convenient access by students, staff and parents, providing security in a school is different than in other types of buildings. The goal should be to provide a reasonably safe and secure environment in a manner that least impacts the overall operation of the facility. This is not an easy – particularly in the case of Options “A” and “A-1” where the “campus” design of the existing school would remain in effect.

Options “A” and “A-1”: The scope of work for both of these options includes the installation of perimeter fencing and the creation of more controlled access points to the facility. These measures, estimated to cost approximately \$100,000, would provide more obstacles to entering the site and the facility. Designing and implementing these measures in a manner that minimizes an “institutional” look while still providing an adequate level of security will be challenging but is certainly possible.

Another option for providing an additional level of security includes the installation of access control locks on classroom doors. This would certainly provide an added layer of security. Depending on the type and number of lock devices selected, the cost could range from \$50,000 to \$100,000. However, it will also create added inconvenience for users of the facility and, in the “campus” design of the existing facility, is not recommended. The extensive need for students and staff to travel from classrooms to other areas of the facility requires that classroom doors be easily accessible throughout the school day. Clearly, limited access control devices on primary entrances and other key points of entry have merit and would be recommended. However, installing these devices on classroom doors does not seem feasible.

A third layer of security could also be provided by installing closed circuit television cameras in strategic areas of the school. Depending on the number and types of cameras, the cost could vary from \$25,000 to \$50,000. It is important to point out that added staff would be required to monitor the cameras. The cameras will only be effective if they are appropriately monitored. This added personnel cost would be approximately \$40,000 per year (plus benefits).

Exterior lighting is also an important security measure and is included in the basic scope of work for Option “A”.

Option “C”: If built in a traditional manner, a new school would have a level of security comparable to the other elementary schools in the district. Access locks and cameras would be provided on the main entrances and are included in the basic scope of work for Option “C”. Exterior lighting is also included in the basic scope of work.

Schedules:

In reviewing project schedules, there are three important factors that must be kept in mind. These include:

- The deadline for filing a project with the State Department of Education is June 30th of each year.
- 100% of local funding must be in place prior to filing the project with the State.
- Once filed, a project is not typically approved for reimbursement by the State Legislature until June of the following year.

Two sets of schedules have been developed for Options “A” & “A-1” and for Option “C”. The first set of schedules is based on a June 2005 filing date with the State Department of Education and the second set is based on a June 2006 filing date. The schedules based on the June 2005 filing date are potentially achievable. However, the time frame is extremely tight and there is very little contingency time built into them. The schedules based on the June 2006 filing date allow longer durations for some specific tasks and have more overall contingency built in.

Charts illustrating the sequencing of events, the duration of time required and the start date and end date for each event are included on the following page. In addition, traditional bar schedules are also provided. It should be noted that, in both the charts and the bar schedules, the sequencing and duration of events could vary based on how the decision-making process develops and proceeds. The schedules are not absolute. Rather, they are intended to illustrate a reasonable sequencing of necessary events and an estimation of the time required for each event.

Impact on Existing Facility and Fields:

There is no doubt that each of the options would impact the existing facility and playing fields. From an educational standpoint, impact on the existing building would be more detrimental than impact on the playing fields. Additionally, the longer the total duration of actual construction, the greater the overall adverse educational impact.

Option "A": This Option would significantly impact the operation of the existing facility as significant amounts of construction to the existing facility would take place while it is occupied. Swing space, in the form of portable classrooms, would be required in order to off-load students while rooms are being renovated a few at a time. Renovations to the core areas of the building would be targeted for summer vacations but work could clearly extend into the school year. With the exception of providing a staging area for construction supplies and equipment and the space that would be taken up by the portables, the impact on the playing fields and existing parking lot would be fairly minimal. The total construction duration is four years.

Option "A-1": As with Option "A", the impact on the existing facility would be significant. In addition, due to the construction of a new gymnasium in this option, the overall impact on the playing fields would be increased. However, adequate field space would remain available for use by students. The total construction duration is 4 years.

Option "C": Option "C" would have the least impact on the existing facility but would have the most significant impact on the playing fields. Because the conceptual plans show the new facility being constructed in the existing playing fields, these fields would clearly be off-line for some period of time. Through construction phasing and scheduling, every effort would be made to provide some minimal field areas for the students. However, there would clearly be times when playing fields would not be available. Even after the new building is constructed, several months would still be required in order to demolish the existing building and construct the new playing fields. Clearly, the impact on the playing fields is an issue that would have to be addressed and studied in more detail. The total duration of construction is approximately 2 years.

Building Life Spans:

In terms of long-range planning, the projected life span of each option must also be considered and is an important element of the long-range financial analysis.

Option "A": Although this option would bring the entire facility up to a "like new" status, the projected life span of the facility would clearly not be the same as that of a newly constructed facility. Although upgraded, the facility would still retain most of its wood beam and decking construction and would simply not be as durable as a new facility constructed from structural steel and "bricks and mortar". The engineers and

architects at Fletcher Thompson feel that the upgraded portions of the existing facility resulting from the implementation of Option "A" would have an anticipated lifespan of approximately twenty-five (25) years. Clearly, this could vary depending on the level of maintenance and scheduled upgrades during those years. And, given the facility's construction type and configuration, it is likely that higher than normal levels of maintenance would be required. The 1996 additions would have a slightly longer life span.

Option "A-1": The difference between Option "A" and Option "A-1" is that a new gymnasium would provide a longer lifespan than renovating the existing gymnasium. Assuming the new gymnasium is constructed in the traditional manner, the anticipated life span would be approximately seventy (70) years or more.

Option "C": Presumably, if an entirely new facility were to be constructed, it would be done so using more traditional and durable construction materials and methodology. With that in mind, Fletcher Thompson indicates that the projected life span of a new facility would be at least approximately seventy (70) years or more. Again, this would vary depending on the level of maintenance provided during that time frame. Also, some building components would certainly need to be replaced during the seventy-year period.

Financial Considerations:

The financial considerations are obviously an extremely important part of any future decision regarding Tokeneke School and there are a variety of ways to begin to examine the fiscal impact of each option. In order to begin that discussion, two important questions could be asked in comparing Option "A" with Option "C". First, what is the cost per year for the twenty-year bond period for each option? Second, what is the anticipated total cost over a long-term period for each option?

Cost per Year for 20-Year Bond Period: Although the actual cost per year will vary depending on how the bonding is structured, the average cost per year is simply the total project costs, including debt service, divided by the twenty-year bond period.

	Option "A"	Option "C"
Initial Construction Cost:	\$5,844,756	\$17,331,568
Debt Service:	\$2,650,000	\$ 8,700,000
Total Cost:	\$8,494,756	\$26,030,568
Cost per year for 20 years:	\$ 424,737	\$ 1,301,528

Present Value: Present Value is defined as the value today of a future payment, or stream of payments, discounted at some appropriate interest rate.

The tables show the present value of the stream of payments for Option “A” and “C” over a fifty-year period. They include the initial investment, less anticipated state reimbursement, major maintenance, annual maintenance and utilities. Each of these is shown at the anticipated cost in each future year assuming a 4% inflation rate, except for major maintenance that assumes a 5% inflation rate. The cost of bonding or interest rate is being assumed at 4% annually.

The future major maintenance projects for Option “A” in today’s dollars are:

- Year 10: \$50,000 for miscellaneous items.
- Year 20: \$250,000 for roof replacements, \$30,000 for new oil tank and \$50,000 for miscellaneous items.
- Year 25: \$17,331,568 for construction of a new school.
- Year 35: \$50,000 for miscellaneous items.
- Year 45: \$250,000 for roof replacements, \$30,000 for new oil tank and \$50,000 for miscellaneous items.

The future major maintenance projects for Option “C” in today’s dollars are:

- Year 10: \$50,000 for miscellaneous items.
- Year 20: \$250,000 for roof replacements, \$30,000 for new oil tank and \$50,000 for miscellaneous items.
- Year 30: \$30,000 for new burners, \$30,000 for new boiler tubes, \$50,000 for new fire alarm system and sprinkler upgrades, \$25,000 for elevator upgrades and \$50,000 for miscellaneous items.
- Year 40: \$250,000 for new windows, \$250,000 for roof replacements, \$30,000 for new oil tank and \$50,000 for miscellaneous items.
- Year 50: \$250,000 for new burners, boilers and plant upgrades and \$50,000 for miscellaneous items.

Clearly, the average cost per year during the twenty-year bond period is less for Option “A”. However, the fifty-year cost is less for Option “C”.

The Potential for other Future Significant Projects:

It is also important to consider other significant capital projects that the district could be facing over the next several years. The usual realm of capital projects will certainly continue to be required. The total dollar amount each year will certainly vary depending on the extent and type of projects that are required. However, as long as infrastructure improvement/replacement projects take place in a planned and scheduled approach, it is not anticipated that any projects near the extent of the Tokeneke project will be required.

In addition, current enrollment projections do not indicate that any significant additions will be required at any of the schools in the district for the predictable future. There is always the possibility that portable classrooms could be required. However, the construction of permanent multi-room additions or significant additions to core areas due to increased enrollment is not envisioned at this time. Clearly, enrollment projections at the elementary level will need to be carefully studied as any plans for Tokeneke School are developed.

Interim Repair/Replacement Measures:

Regardless of the option that is selected, construction will probably not begin until the summer of 2005 at the earliest. Therefore, there are some interim repair and replacement measures that will need to be implemented prior to construction. These measures will vary depending on which option is eventually selected for implementation. If Option "A" or "A-1" is selected, the objective in implementing interim repair and maintenance measures would be to complete work that could remain in place on a permanent basis and would not be affected by the overall renovation of the school. In effect, most of these would not be interim measures. Rather, they would be elements of the overall project that should be considered for implementation as soon as reasonably possible. If Option "C" is selected, the objective will be to only implement those measures that are absolutely required in order to keep the school safely operating until the opening of the new school. Clearly, minor improvements and upgrades would be implemented in order to avoid creating an atmosphere of neglect at the school. However, the replacement of major building systems would be placed on hold if possible.

The table on the following page lists potential interim repair and maintenance measures for consideration and indicates which measures would be recommended for implementation based on which option is selected. Unless a decision on a preferred option is substantially delayed, the more major interim measures could be targeted for completion during the summer of 2004 and many of the less costly measures could be implemented sooner.

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November 6, 2003*

Description of interim measure:	Cost:	Implement interim measure if...		
		Option "A" is selected	Option "A-1" is selected	Option "C" is selected
Re-roof gymnasium	\$100,000	Yes	No	No
Re-roof library	\$ 75,000	Yes	Yes	No
Perform evaluation of gym & library roofs to determine if interim repairs are required	\$ 2,500	No	No	Yes
Replace "Murphy tables" in common room	\$ 6,000	Yes	Yes	Yes
Replace gymnasium boiler and pumps	\$ 75,000	Yes	Yes	No
Replace insulation on kitchen roof top duct work	\$ 10,000	Yes	Yes	No
Repair existing insulation on kitchen roof top duct work	\$ 1,000	Yes	Yes	No
Provide lockable covers on panel boards	\$ 2,500	Yes	Yes	Yes
Relocate panel board in gym office	\$ 2,500	Yes	Yes	Yes
Upgrade receptacles to GFI type	\$ 500	Yes	Yes	Yes
Implement security fencing	\$100,000	Yes	Yes	To be determined
Implement additional security upgrades (cameras)	\$ 25,000 to \$ 50,000	To be determined	To be determined	To be determined
Total cost of interim measures for each option:		\$371,500 plus any additional security measures	\$196,500 plus any additional security measures	\$15,000 plus any additional security measures

Given the age and condition of the existing facility, unplanned emergency repairs not included in the above list could certainly be required. However, this is very difficult to predict. In addition, because many of the building systems are so inter-related, replacing individual components on an interim basis and not as part of an overall upgrade to the existing facility would be very difficult. Finally, in addition to the above list, many small ongoing maintenance and repair projects and upgrades would also be completed regardless of which option is eventually selected.

If no Option Moves Forward:

If Tokeneke School is to remain a viable facility for educating our children, then infrastructure upgrades will need to be implemented in the next few years. If this does not take the form of a single capital project, then smaller capital projects will be proposed each year for the next several years. The most important elements of Option "A" would be proposed for implementation over an extended period of time. The projects that would initially be proposed would be those aimed at replacing the school's infrastructure systems. In essence, the Priority Level 1 projects that are identified in the attached *Summary of Option "A" by Priority Level* would be proposed for completion during the next few years. The total cost for these Priority Level 1 projects is estimated to be approximately \$2,310,431 (plus escalation).

Eventually, most of the elements of Option “A” would be proposed for implementation over the next several years. However, it has already been pointed out in the report that examined implementing Option “A” over an extended period of time that this is not viable. The added cost, the increased construction risks and the prolonged adverse educational and operational impact on the school will be significant and proceeding in this manner is not recommended.

Summary:

Tokeneke School clearly needs significant upgrades. Reaching a conclusion as to which option is the most viable really depends on the overall objectives. If the objective is to upgrade the infrastructure of the facility by spending the least amount of money annually during the 20-year bonding period, then Options “A” or “A-1” clearly meet that objective. However, if the objective is to provide a facility that is educationally and operationally sound and is a more economical long-term solution, then Option “C” meets that objective.

As educators, our objective is clearly the latter. Regardless of which option is ultimately decided upon by the Board of Education and the community, leaving the facility in its current state for an extended period of time is not an option.

Summary of Advantages and Disadvantages for each Option:

Option "A" – Update Existing Facility to "Like New" Status: \$5,844,756

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Less expensive construction cost ▪ Lower cost per year for 20-year bonding period ▪ Preserves the 1995 additions ▪ Provides badly needed infrastructure upgrades ▪ Provides some, but limited, educational improvements 	<ul style="list-style-type: none"> ▪ Life span is only 25 years. Substantial expenditures would then be required to construct a new facility ▪ Does not fully address security issues ▪ Functional/operational/educational inadequacies in current facility will not be alleviated ▪ Portables are required for swing space ▪ Longer construction duration – more negative educational impact ▪ The increased level of maintenance required with this type of a facility would still be required

Option "A-1" – Upgrade Existing Facility to "Like New" Status and Construct a New Gymnasium: \$6,153,028

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Less expensive construction cost ▪ Lower cost per year for 20-year bonding period ▪ Preserves the 1995 additions ▪ Provides badly needed infrastructure upgrades ▪ Provides new gymnasium in lieu of a renovated gymnasium ▪ Provides some, but limited, educational improvements 	<ul style="list-style-type: none"> ▪ Life span is only 25 years. Substantial expenditures would then be required to construct a new facility ▪ Does not fully address security issues ▪ Functional/operational/educational inadequacies in current facility will not be alleviated ▪ Portables are required for swing space ▪ Longer construction duration – more negative educational impact ▪ The increased level of maintenance required with this type of a facility would still be required

Option "C" – Construct New Facility on Existing Site: \$17,331,568

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Provides a greater life span. This will result in lower annual costs for the next 70 years. ▪ Will result in a facility that is much more conducive to the delivery of education ▪ Will help alleviate operational and maintenance problems ▪ A more compact building footprint will result in additional field areas for community use ▪ Shorter construction duration ▪ Reduced levels of maintenance will be required 	<ul style="list-style-type: none"> ▪ More expensive construction cost ▪ Higher cost per year for 20-year bonding period ▪ Playing fields will be eliminated during construction ▪ Does not preserve 1995 additions/renovations